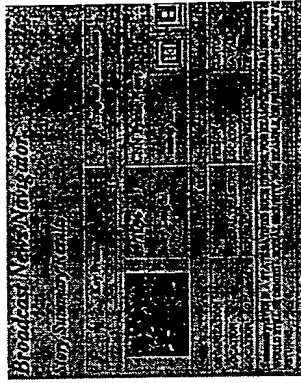


Broadcast News Navigator (BNN)



Web-based
Browse/Search by:

- Time
- Program
- Keyword
- Person
- Location
- Subject

Broadcast News Editor (BNE)

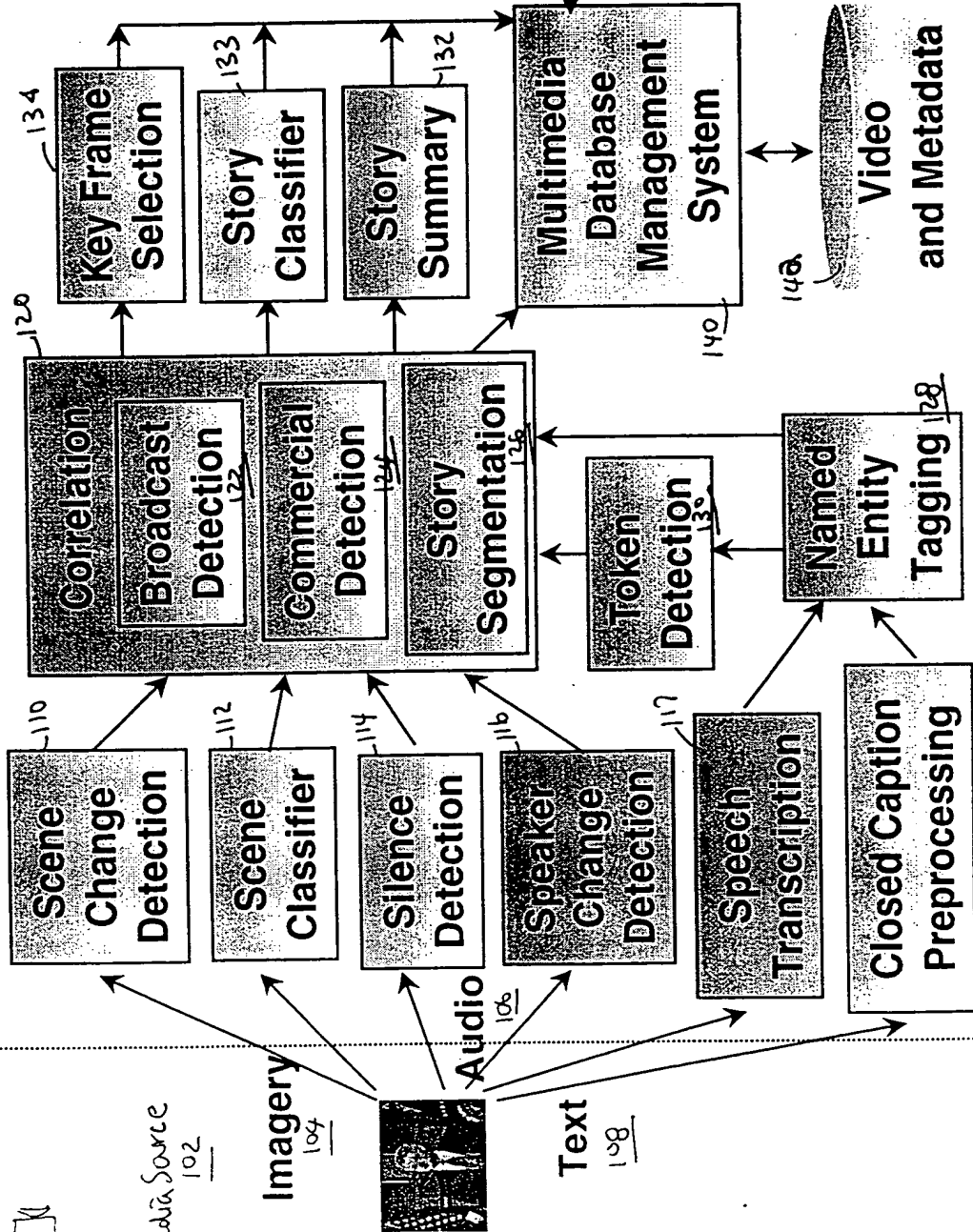
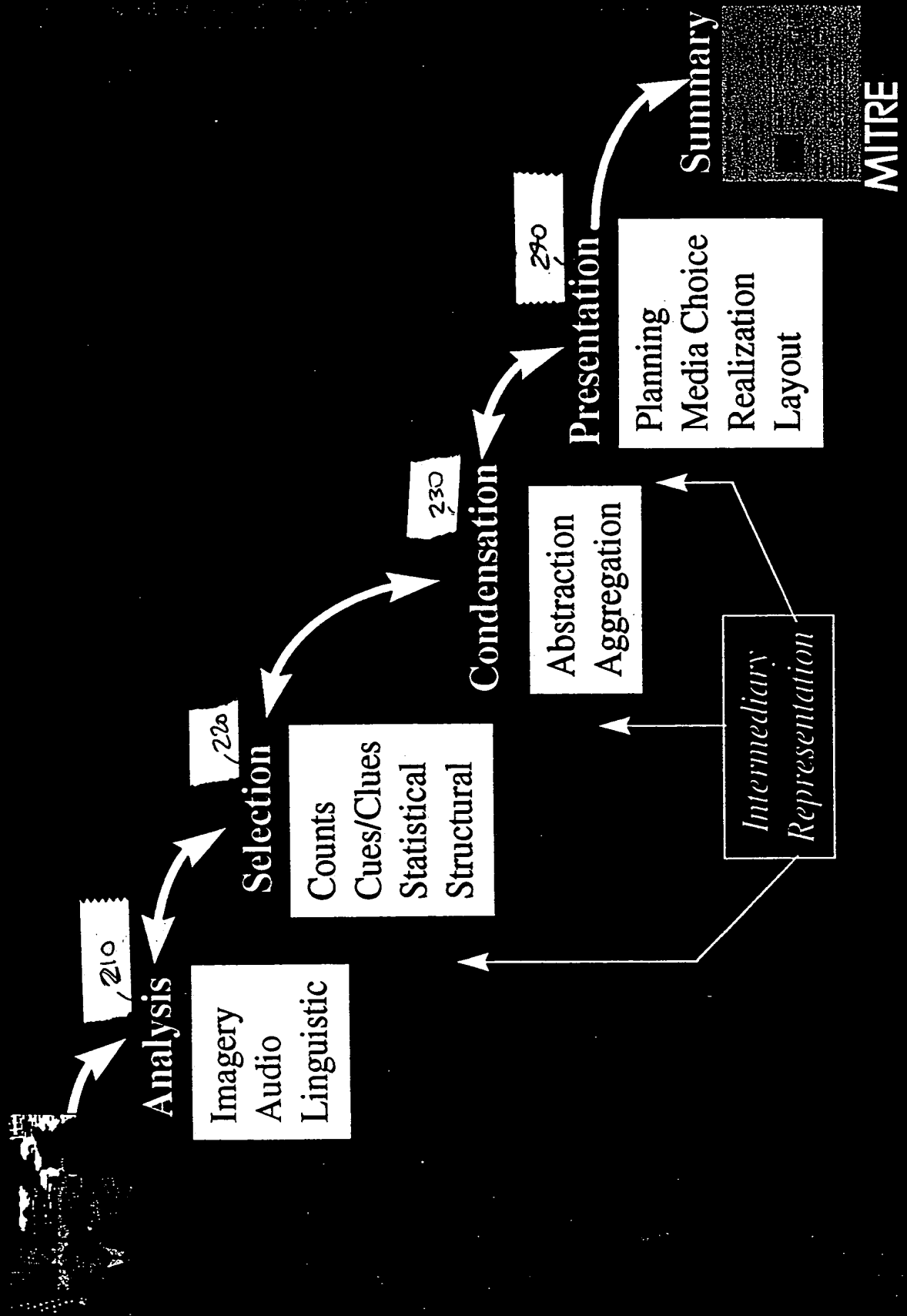
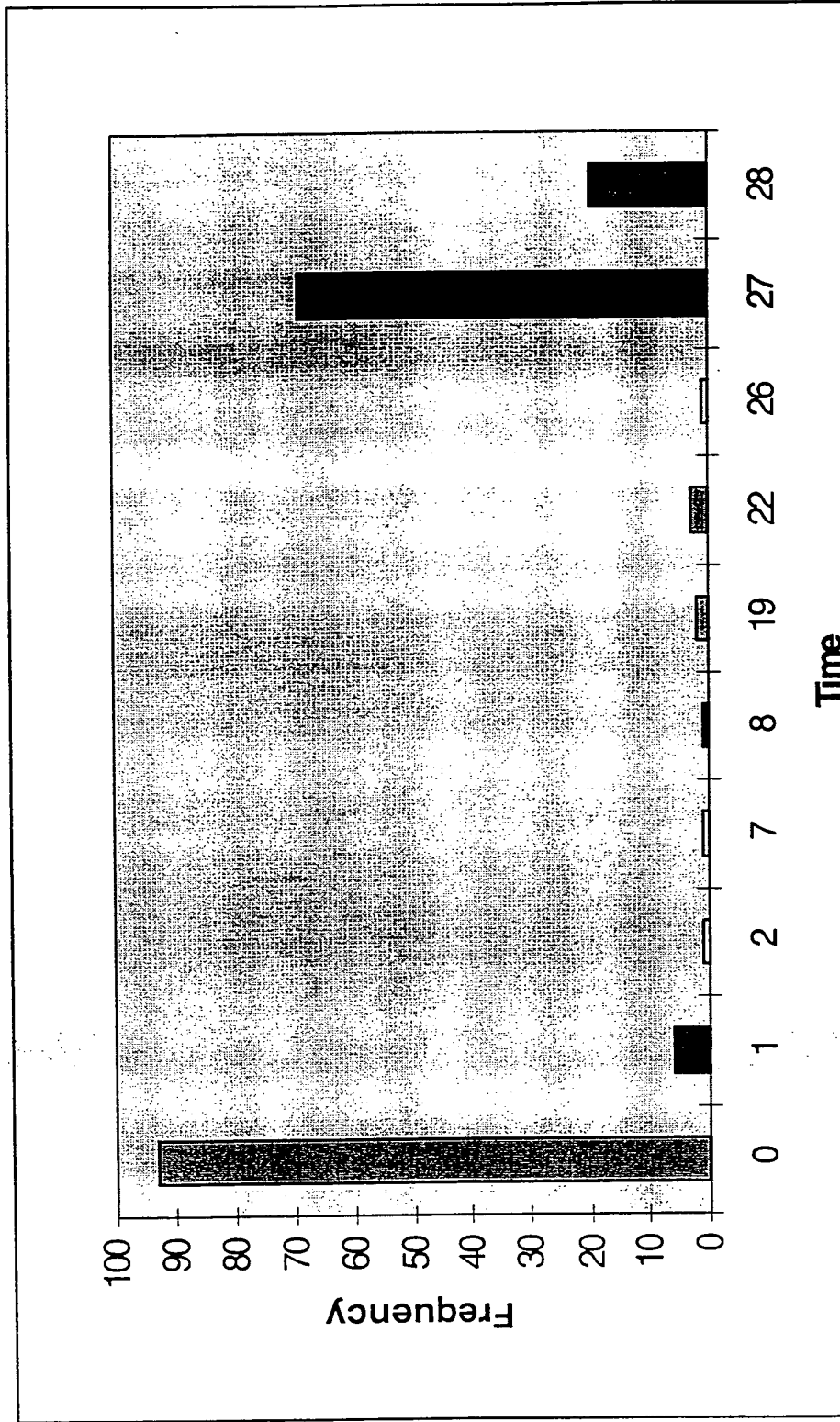


FIG. 1

Video Summarization



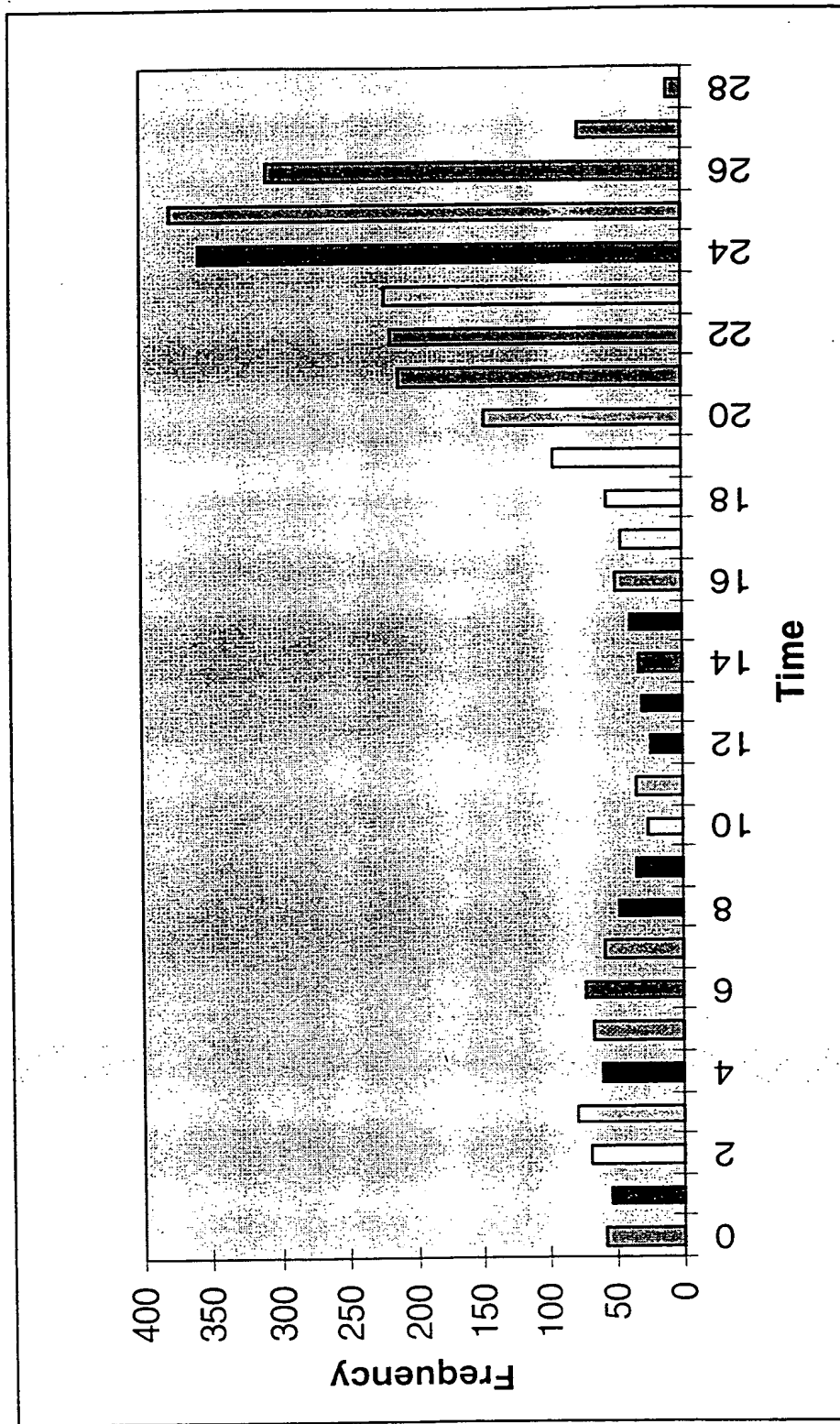
Phrase Frequency -- "I'M" <Person>



Uses Phrase 'I'm' and Alembic's detection of a <Person>

FIG. 3

Weather Term Frequency

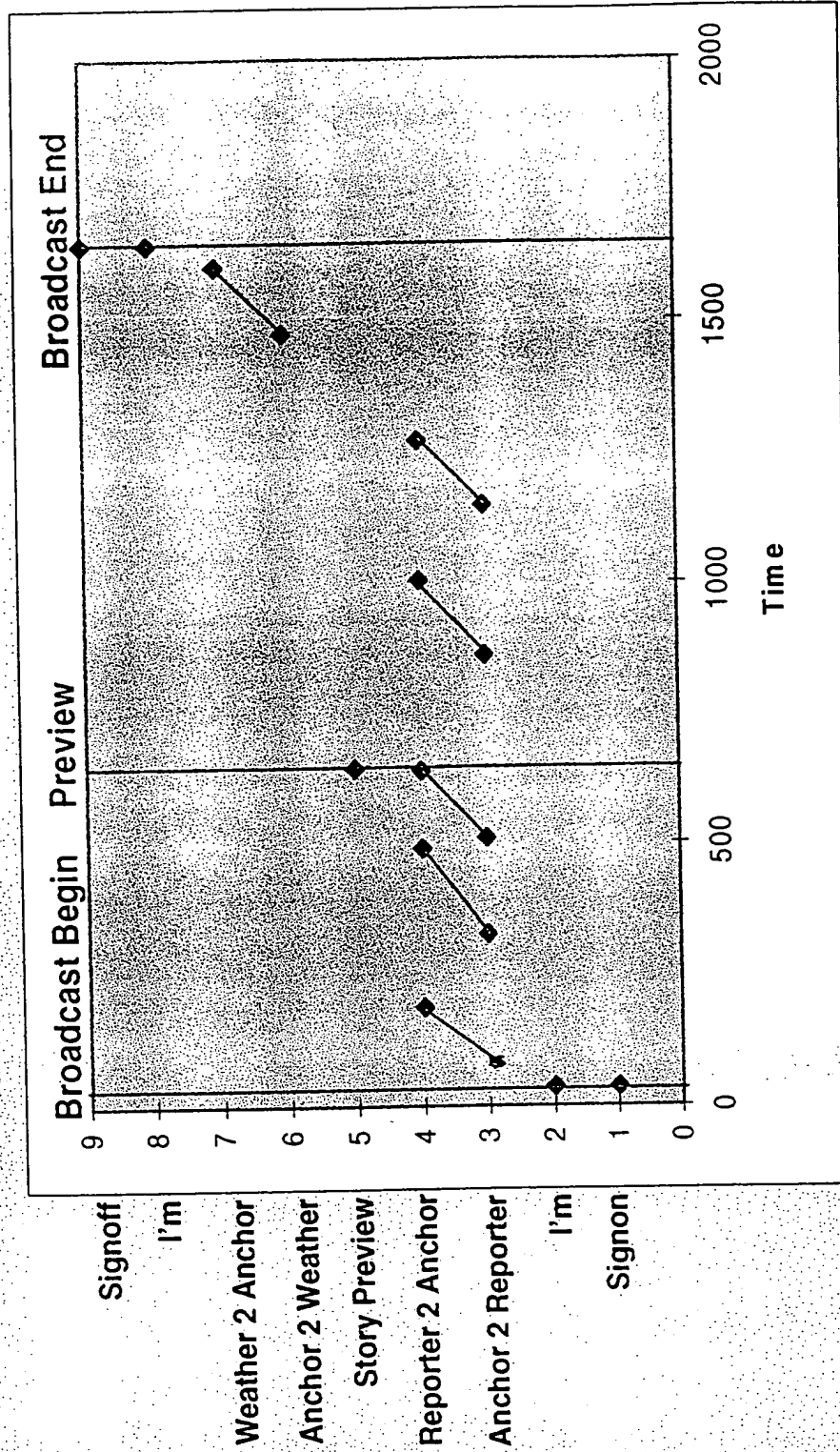


Most CNN Prime News weather forecasts start after 18 minutes.

FIG. 4

BNA Textual Tokens

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 Inventors: Mark T. Maybury, *et al.*



No Anchor Replacements

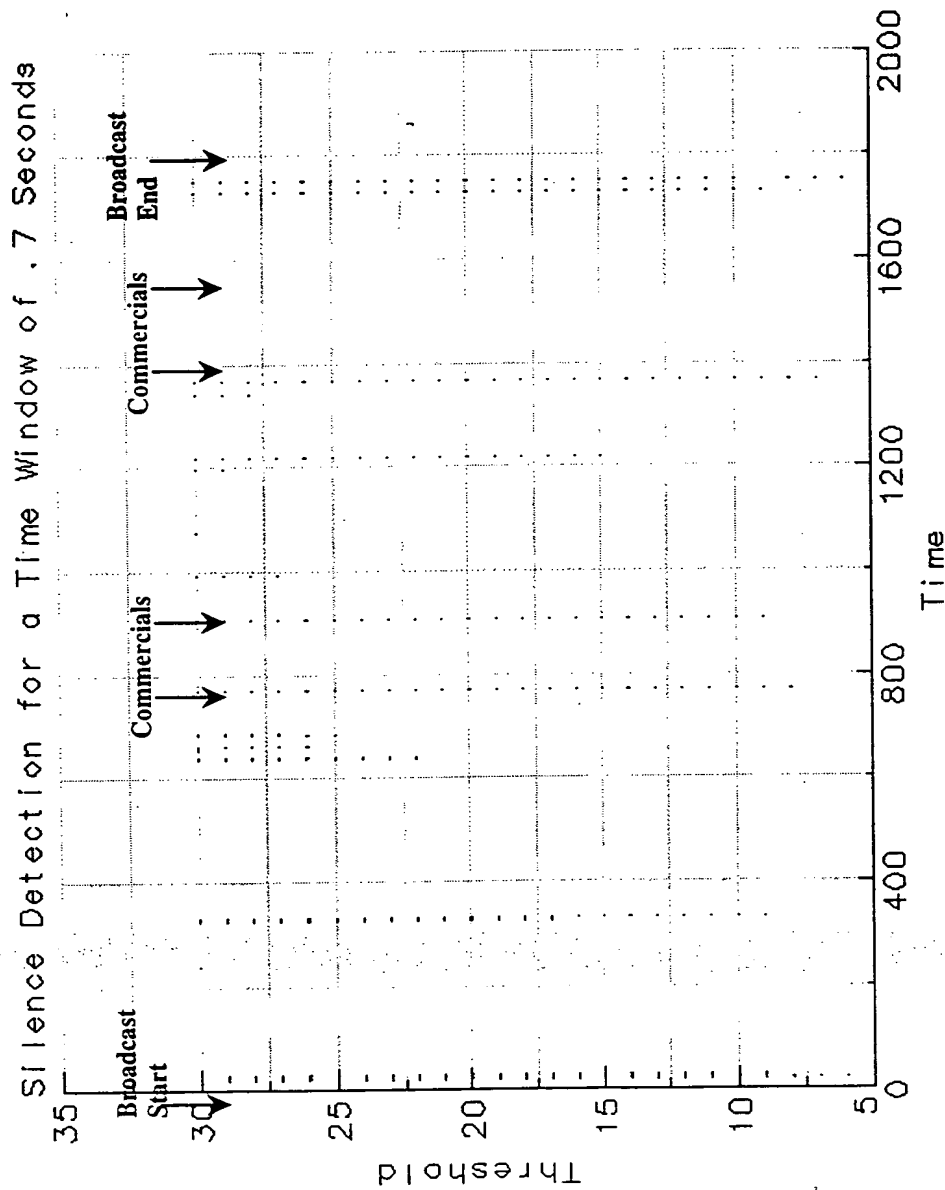
Truth

Automatic Detection

CNN Prime 2/25/97

FIG. 5

Silence Detection



CNN Prime News 12/23/96

FIG. 6

Scene Classification

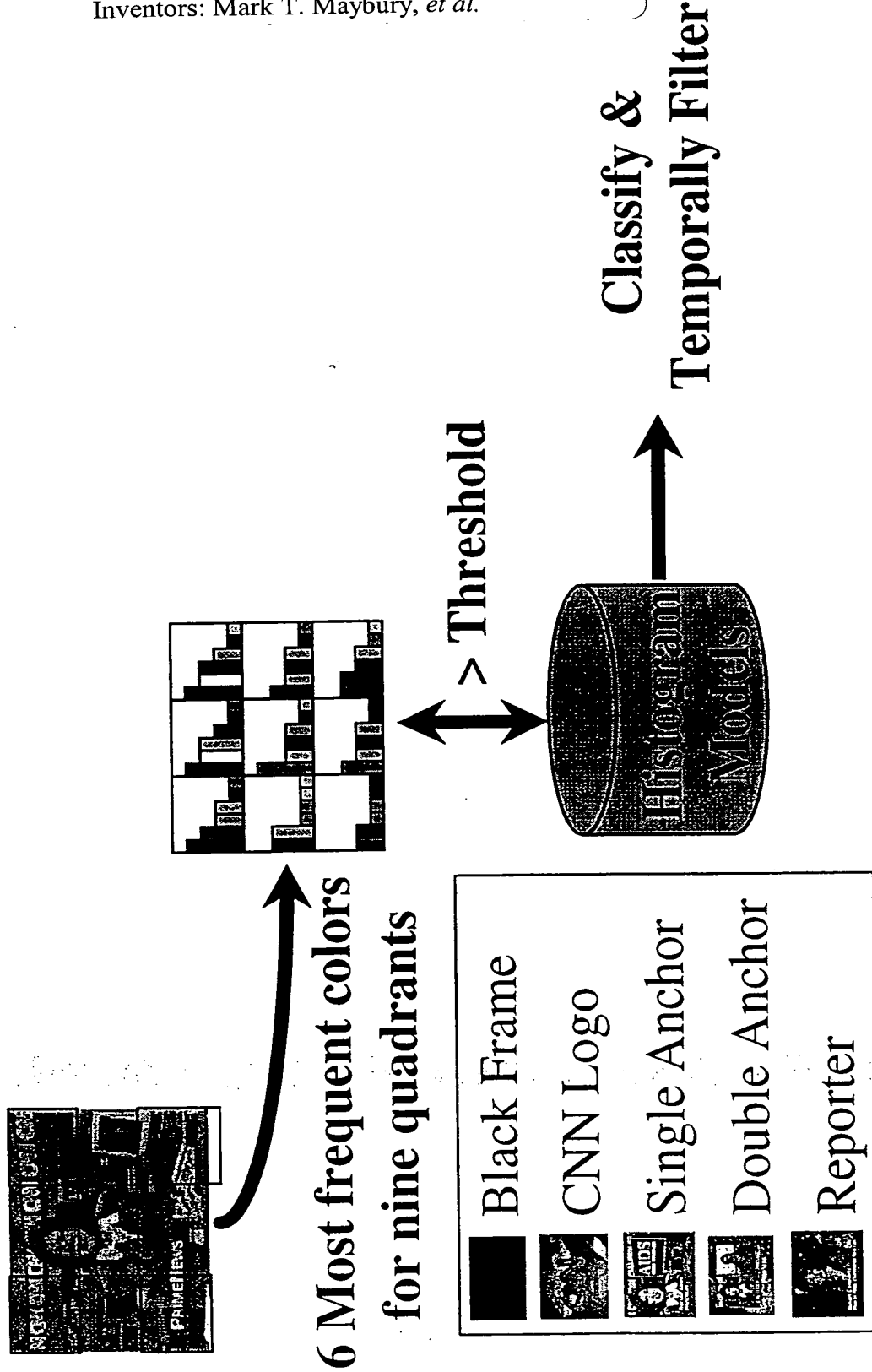


FIG. 7

CNN Graphical Vocabulary

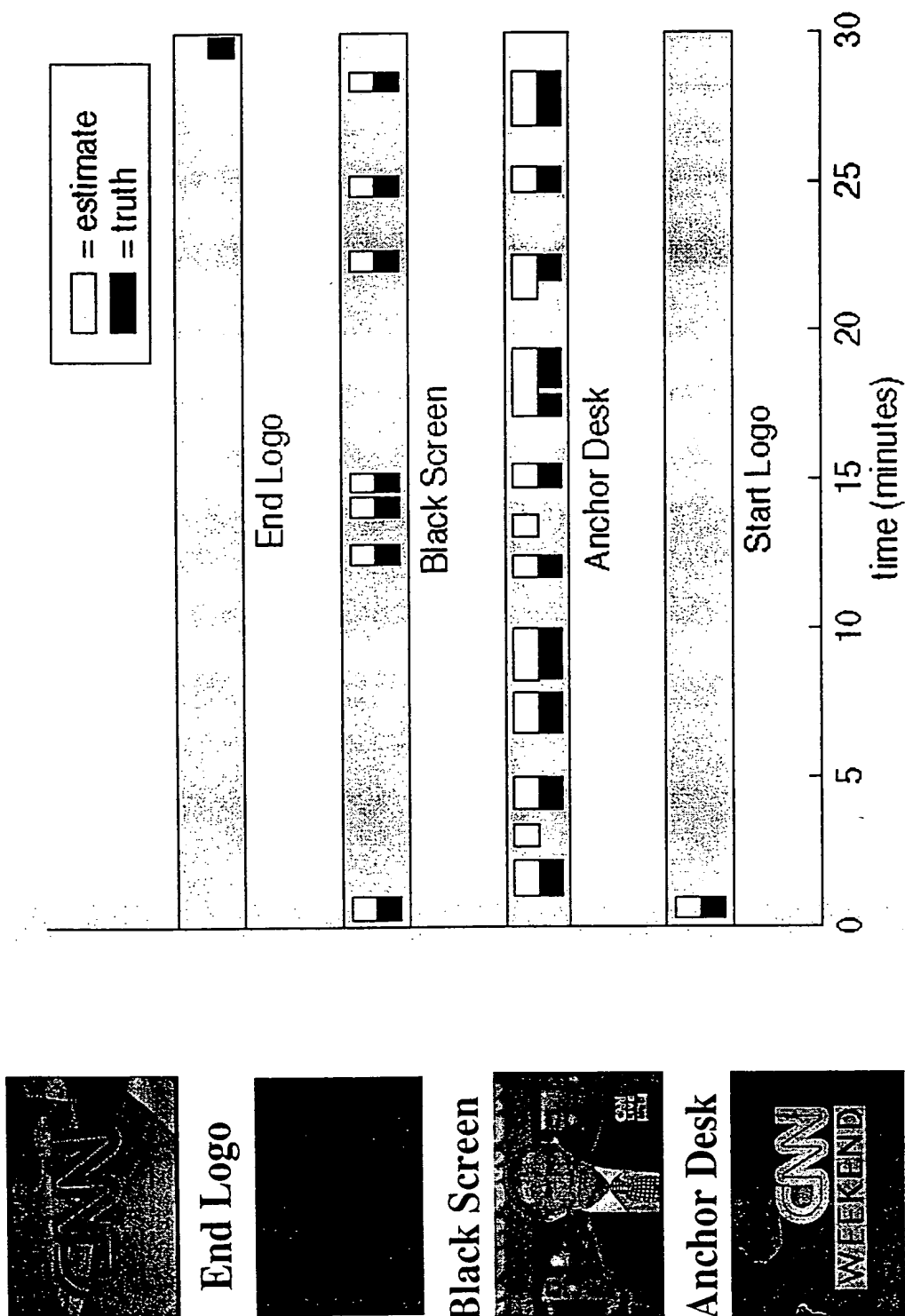


FIG. 8

BNA: Cue Correlation for CNN Prime News 3/24/97

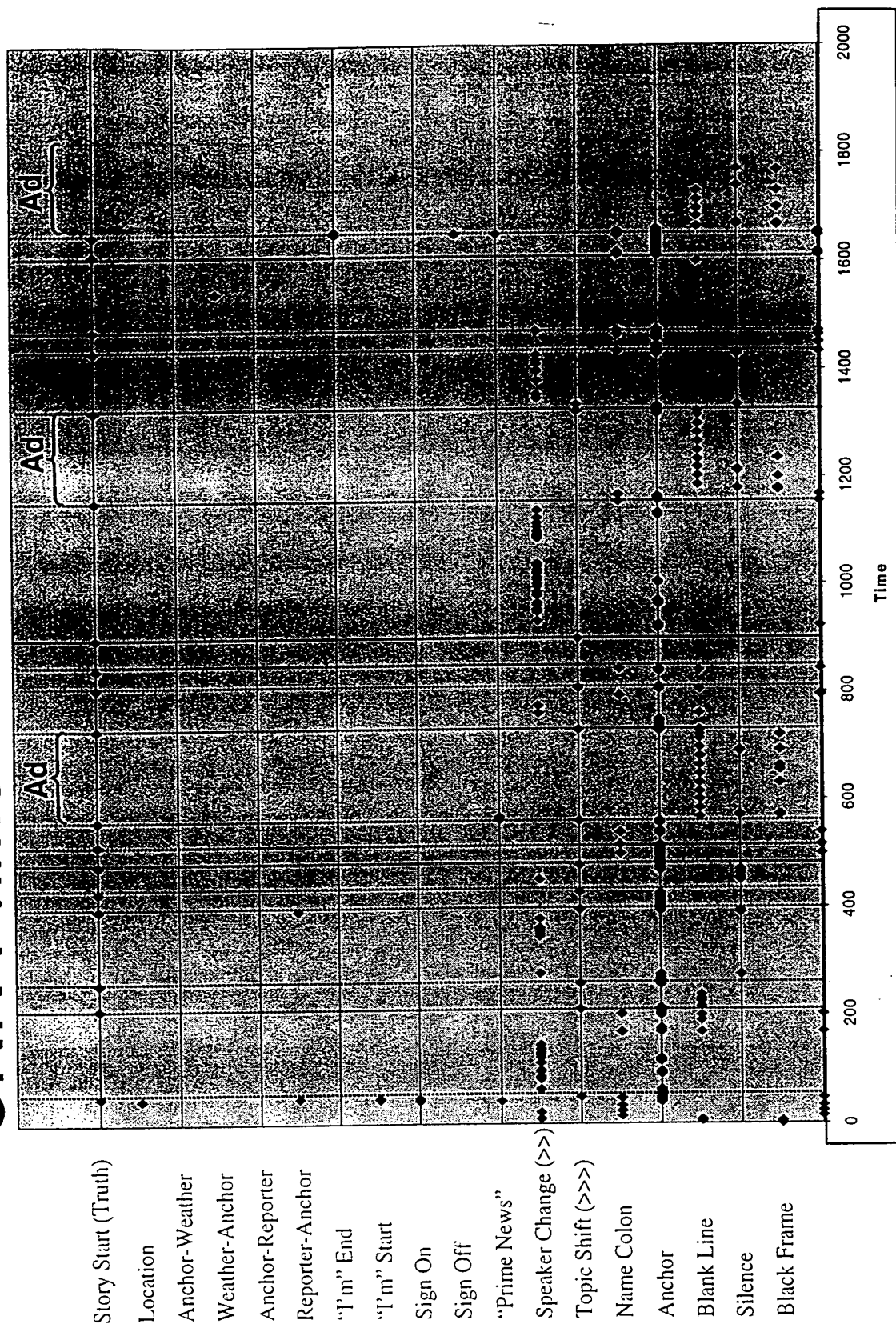


FIG. 9

Broadcast News Analysis:

Story Segment Identification Overview

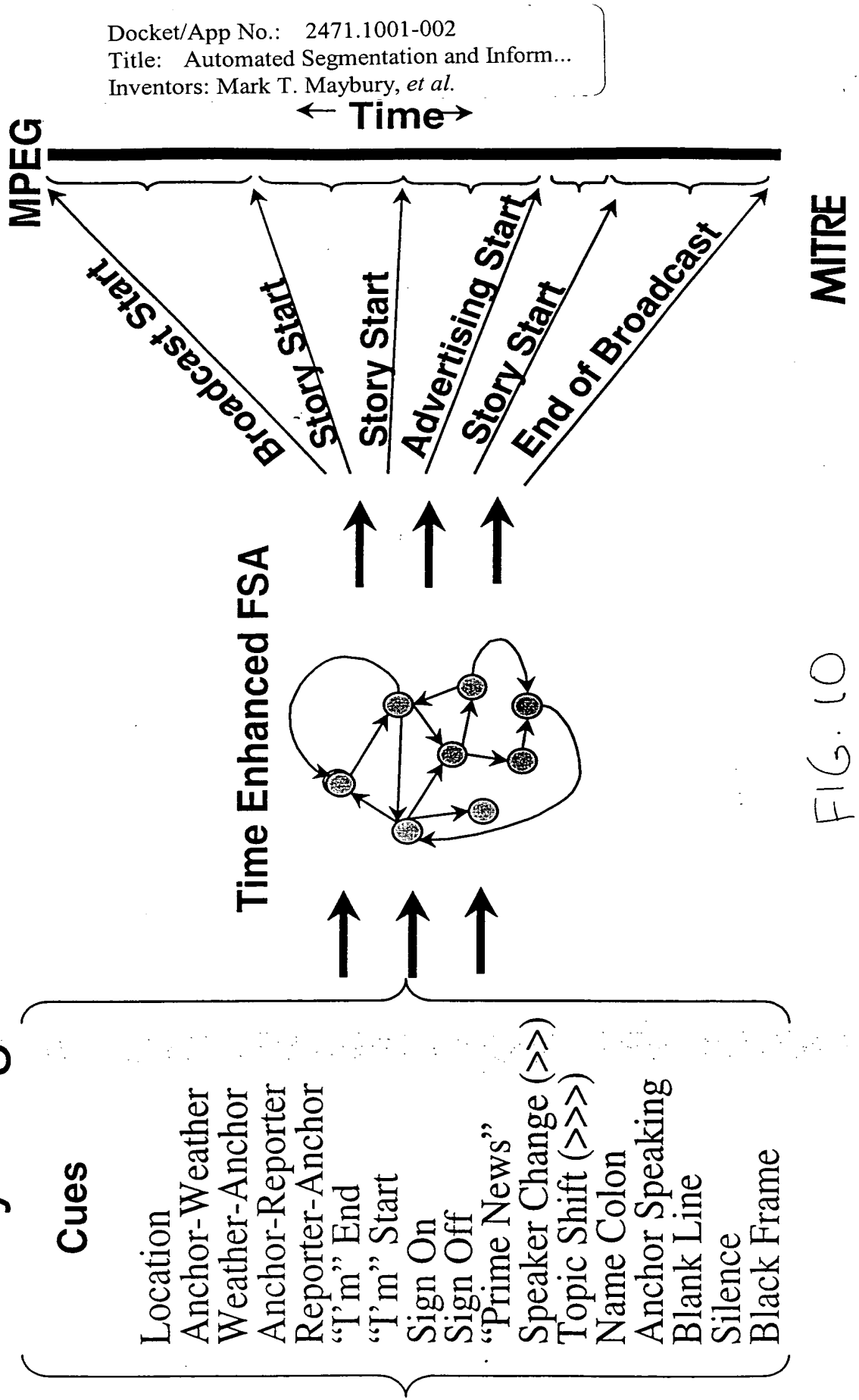


FIG. 10

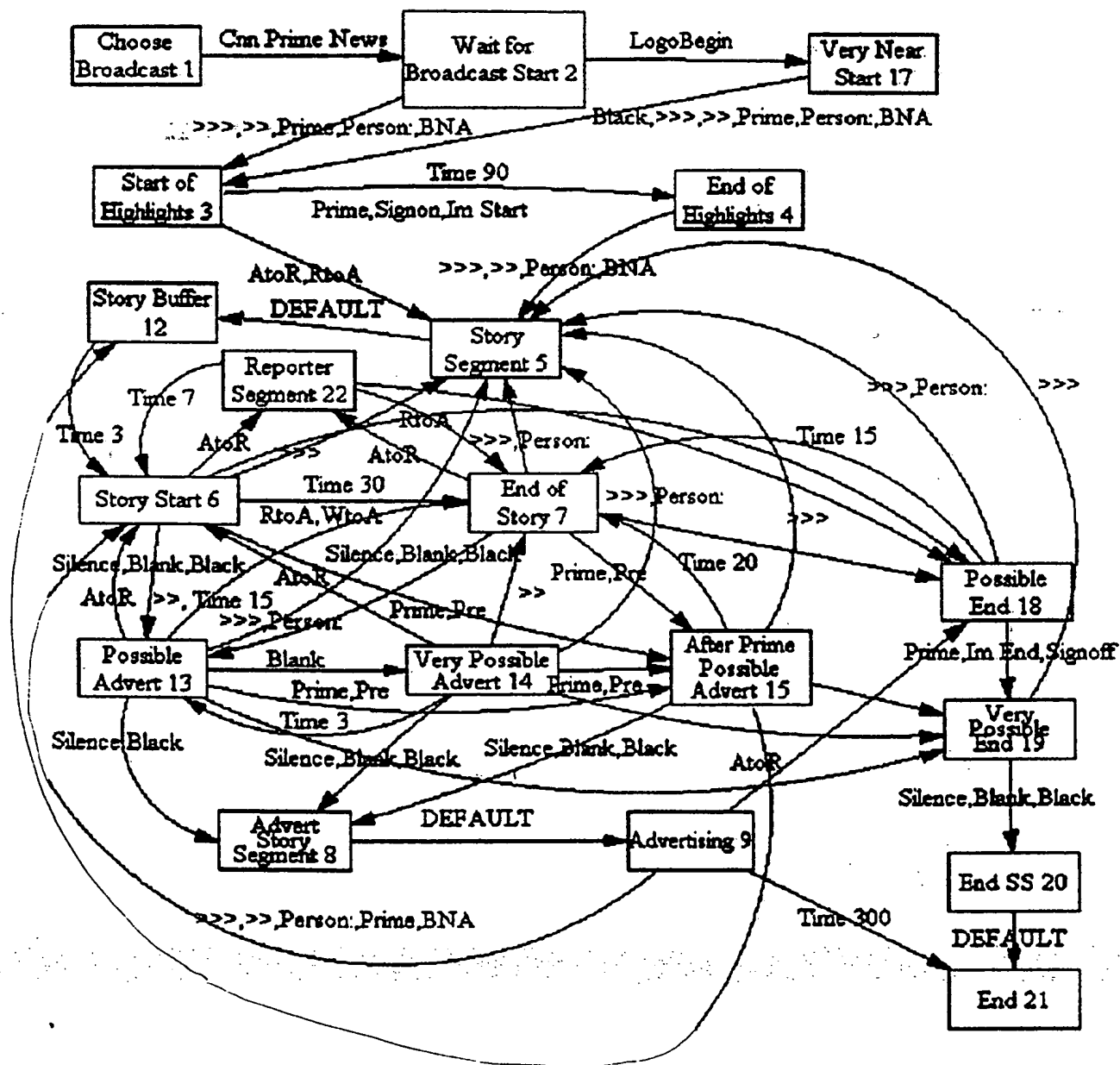


FIG. 11

State_ID Description

- 1 Start
- 2 Wait for Broadcast Start
- 3 Highlights Begin
- 4 Highlights are ending
- 5 Story Segment Detected
- 6 Start of Story
- 7 Near end of Story
- 8 Advert Story Segment
- 9 Wait for Advert End
- 10 Broadcast End Story Segment
- 11 Broadcast Over
- 12 Story Buffer
- 13 Possible Advertisement
- 14 Very Possible Advertisement
- 15 Prime Possible Advertisement
- 16 Prime Highlight
- 17 Very Near Start
- 18 Possible end of Broadcast
- 19 Very Possible End
- 20 End Story Segment
- 21 End Broadcast
- 22 Reporter Segment

FIG. 12

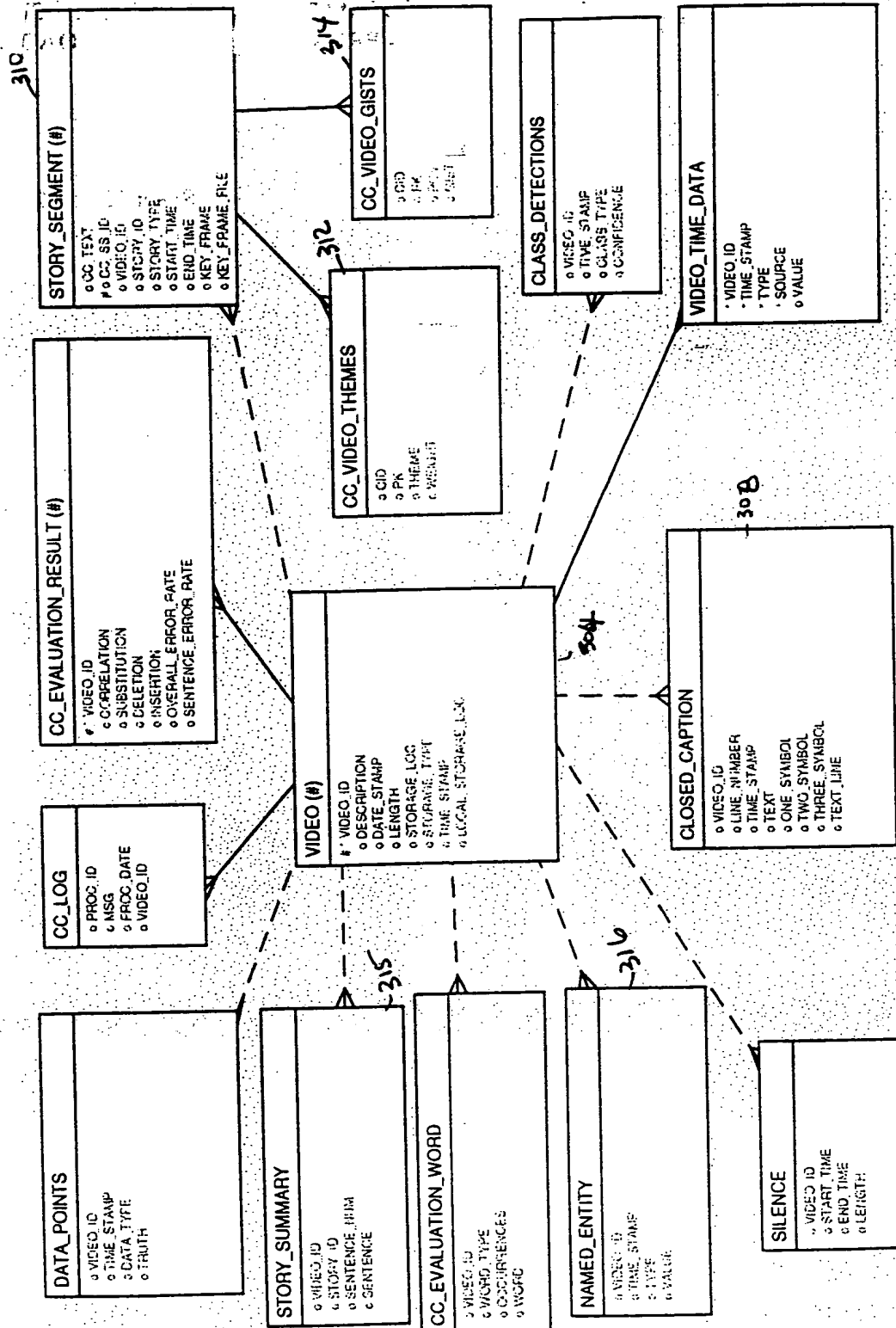


FIG. 13

Visualizing the News

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Inventors: Mark T. Maybury, *et al.*

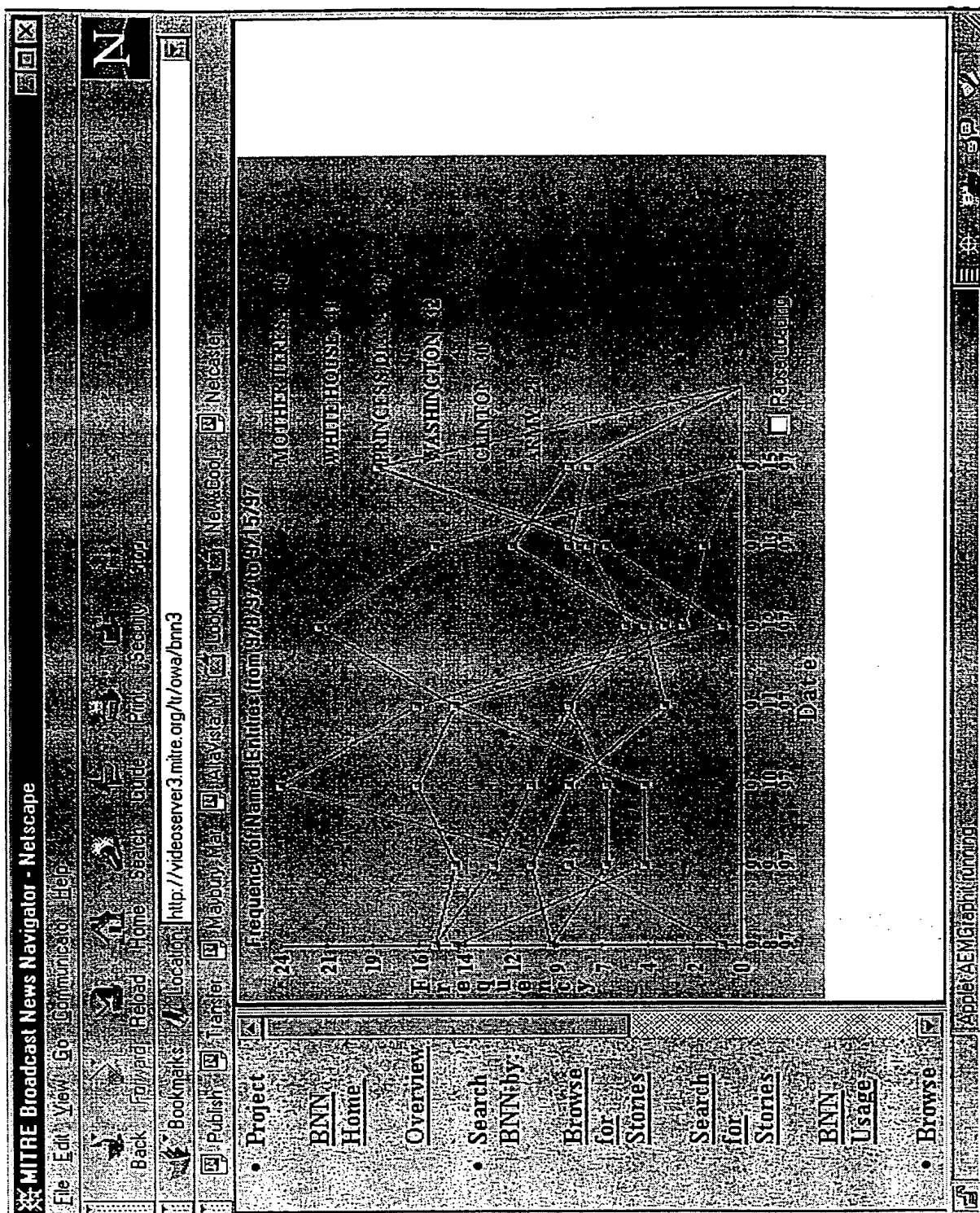


FIG. 14

Broadcast News Navigator Query Screen

Broadcast News Navigator Story Search

Select the type of News Source, the place of origin, and the type of news source. Times.com is searching.

News Source

60 Minutes
ABC News Nightline
ABC World News
Andy's Story Segmentation Evaluation
CBS Evening News
CNN Early Prime
CNN Headline News
CNN International

Type of Search

☒ Text Search
☐ Topic Search
☐ Person Search
☐ Organization Search
☐ Location Search

Broadcast Dates

From Date: 01 JAN 1996
To Date: 01 JAN 1996

☐ Last 24 hrs
☐ Last 3 days [From 24 SEP 1997]
☐ Last Week [From 20 SEP 1997]
☐ Last 2 Weeks [From 17 SEP 1997]
☐ Last Month [From 28 AUG 1997]
☐ Last 3 Months [From 20 JUL 1997]
☐ Last 6 Months [From 22 MAR 1997]
☐ Last Year [From 20 Dec 1996]

Project

[BNN](#)
[Home](#)
[Overview](#)
[Search](#)
BNN by
[Browse](#)
for Stories
[Search for](#)
Stories
[BNN](#)
[Usage](#)
[Browse](#)
Other
[Sources](#)

FIG. 15

BNN Browse

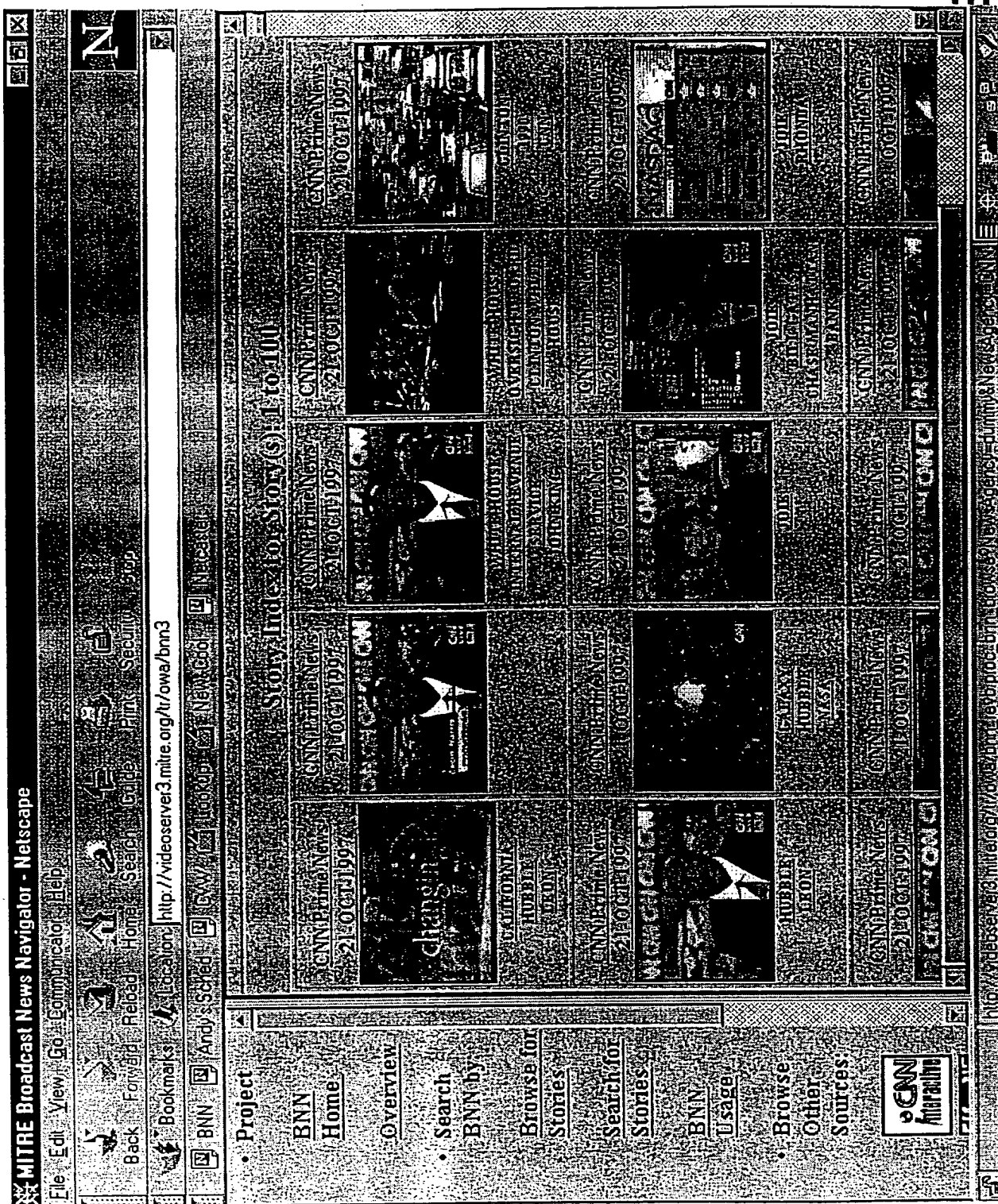


FIG. 16

BNN Browsing: "Pentagon"

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Title: Automated Segmentation and Inform...
Inventors: Mark T. Maybury, *et al.*

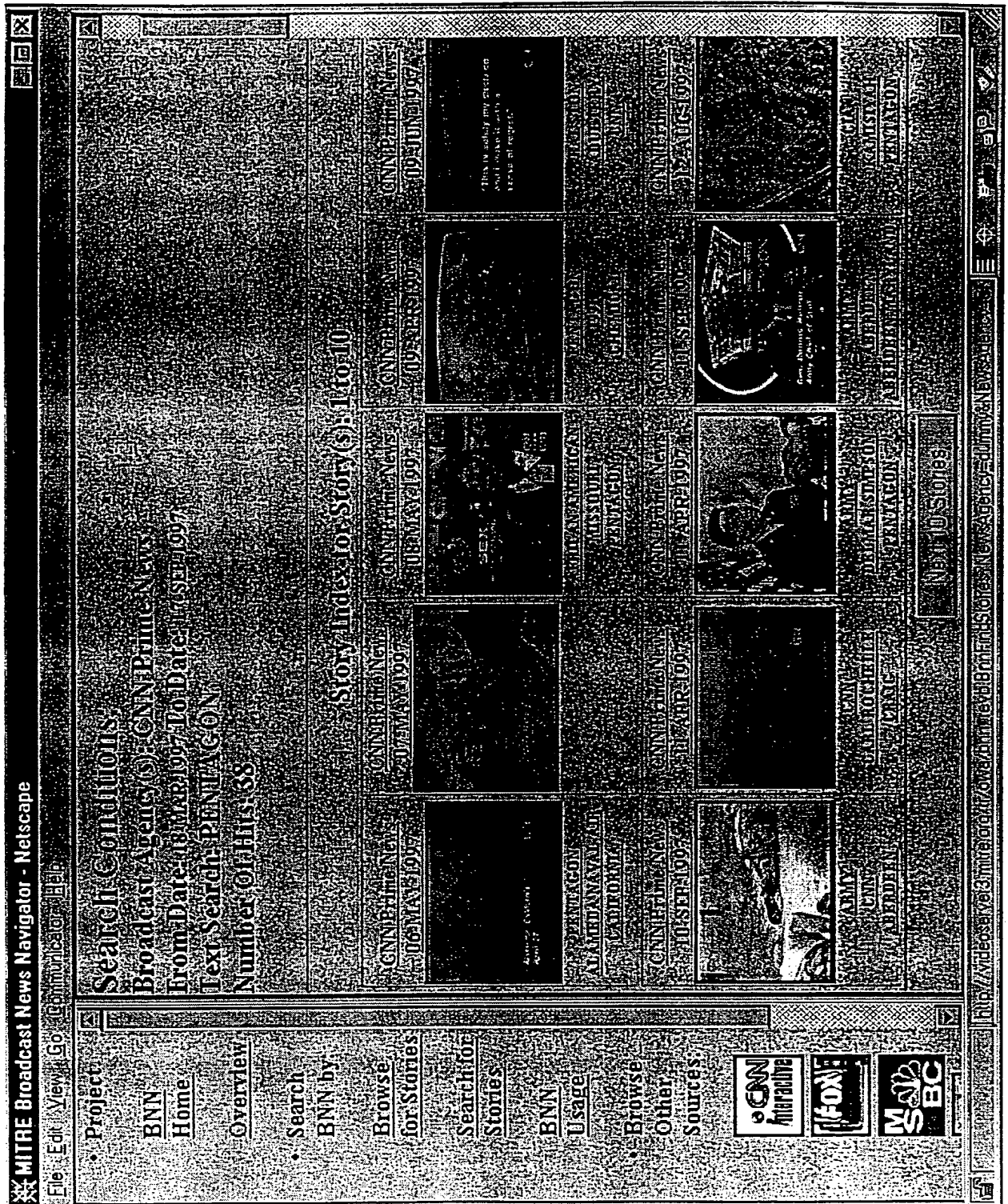


FIG. 17

Web-user Identifies Time Period and Story Topic of Interest

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Inventors: Mark T. Maybury, *et al.*

Broadcast News Navigator		
Tag Frequencies for the Last 7 Days		
Occurrences	Type	Value
86	ORGANIZATION	GNN
58	LOCATION	SEMPSON
45	PERSON	LINDEN
42	PERSON	NATANE
31	PERSON	CEINTON
26	PERSON	QUEBETSON
25	PERSON	TEANIE
15	LOCATION	WASHINGTON
14	ORGANIZATION	WELLES HOUSE
14	PERSON	NICOLE BROWN SIMPSON

User
Selects

FIG. 18

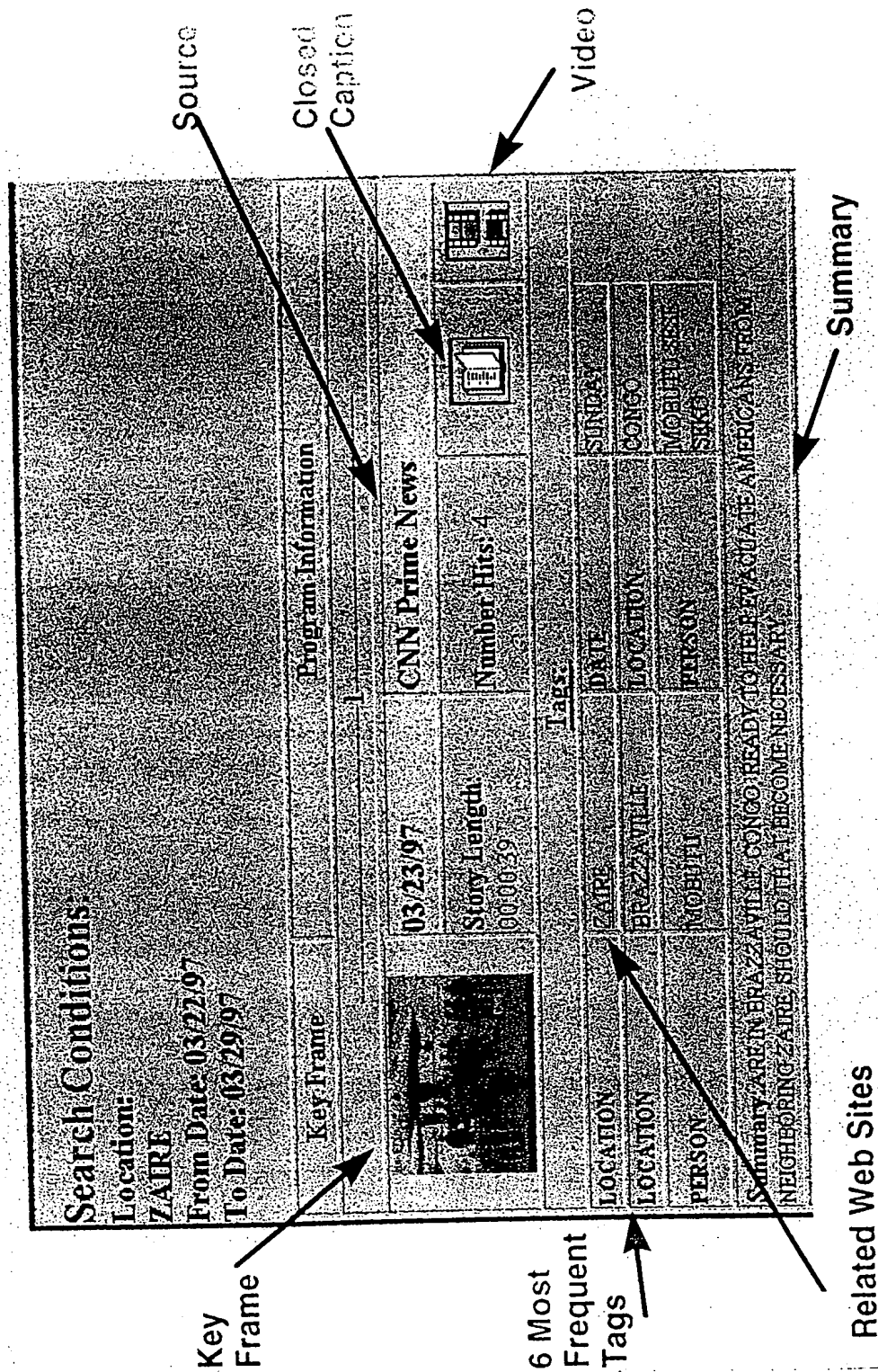


FIG. 19

Viewing the Video

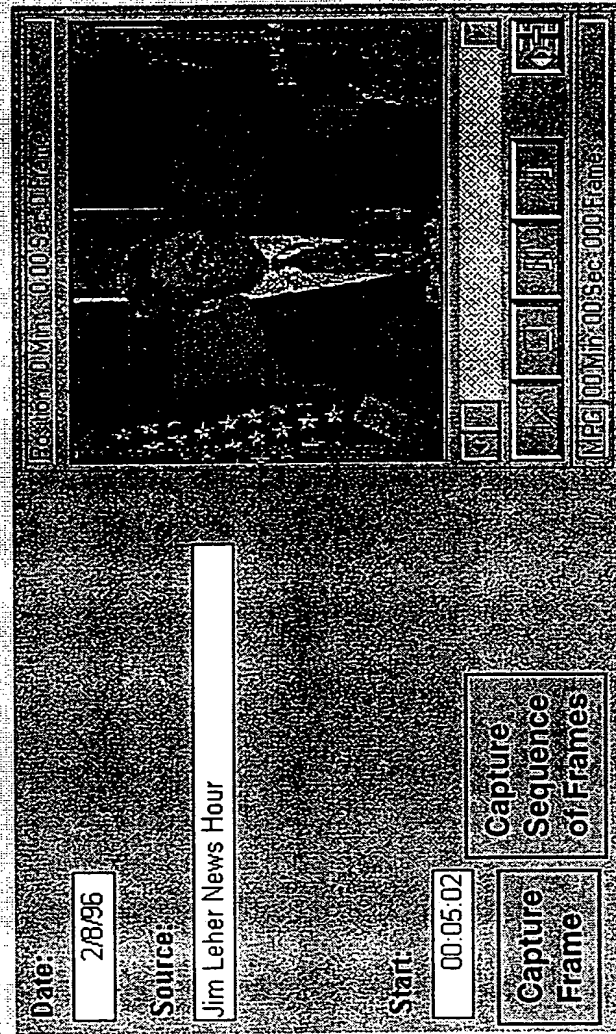


FIG. 20



FIG. 21

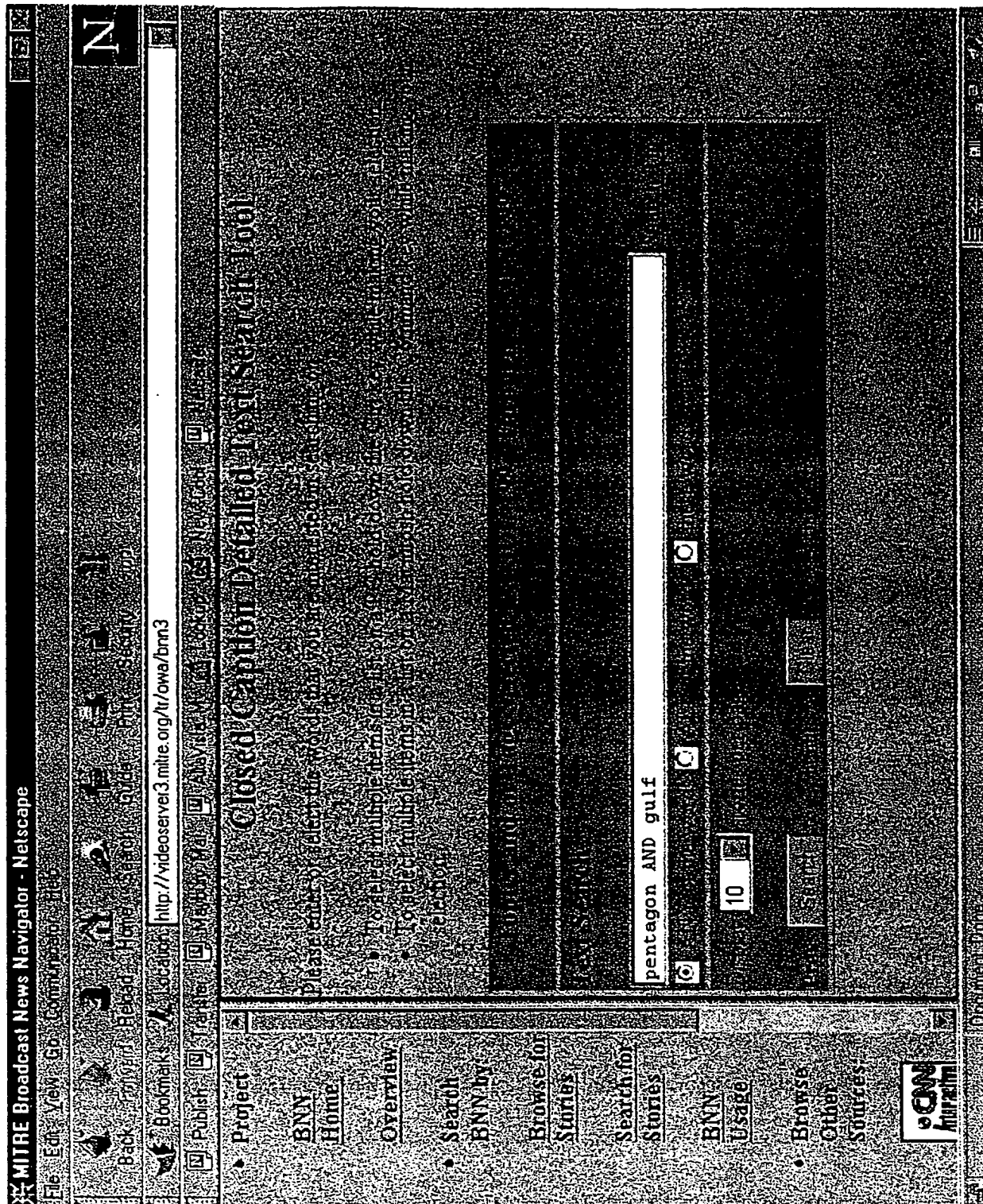


FIG. 22